

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-006005**Date Inspected:** 04-Apr-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1830**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 630**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Si Lei & Wan Wen Zhong**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower and OBG**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Joe Alaniz was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

This QA Inspector performed Ultrasonic Testing (UT) on approximately 10% of East Tower Lift 1 D/E Corner welds previously accepted by ZPMC ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6. 3. The QA Inspector observed a rejectable indication at the time of testing. The QA Inspector generated a TL-6027 UT report on this date. Welds UT verified was identified as listed below:

Bay 11

ESD1-A167/H-124A/B

This QA Inspector observed a Class A discontinuity present in the weldment accepted by ZPMC QC UT personal. This QA Inspector issued an incident report on the above noted UT rejection.

This QA Inspector performed Magnetic Particle Testing (MT) of approximately 25% of the area previously tested by ZPMC MT personnel. This QA Inspector generated a TL-6028 MT report on this date. The weld designation numbers is as follows:

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Bay 14

DP085-001-001~006

This QA Inspector observed the following work in progress:

Bay 13

ZPMC's qualified welding personnel's are identified as Mr. Dong Yongcun (067588), Mr. Wong Jun (067752) and Mr. Zhao Guanglin (044779) perform SMAW welding on weld joints identified as CSD2-DP435-049/050, 053/054 and SEG005A-010. ZPMC QC identified Mr. Shi Lei was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-P-4113-FCM and WPS-B-P-2214-B-U2-FCM.

ZPMC's qualified welding personnel's Mr. Yuan Wei (066164) and Mr. Zhu Bensheng (068047) perform FCAW welding on weld joint identified as CA26-004 and CSD2-PP465-057/058, 061/062. ZPMC QC identified Mr. Shi Lei was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2232-Tc-U4b-F.

Bay 14

ZPMC's qualified welding personnel are identified as Mr. Chang Zhanchi (200432) perform SMAW (repair) welding on weld joints identified as SEG028*-004. ZPMC QC identified Mr. Shi Lei was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-223(2)1T. Repair report # B-WR3486.

Bay 10

ZPMC's qualified welding personnel's are identified as Mr. Liu Jianzhen (052892) perform SMAW welding on weld joints identified NSD1-TL8C/L-3A. ZPMC QC identified Mr. Wan Wen Zhong was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2214-Tc-U4b.

ZPMC's qualified welding personnel's are identified as Mr. Bi Chun (040343), Mr. Ni Xiuba (040533), Mr. Jin Xiaogang (053474) and Mr. Chen Dinghang (067138) perform FCAW welding on weld joints identified as SSD1-FASA3-1E/E-9B, 41B, 13B, 45B, 4B, 36B and SSD1-TL5B/L-3A. ZPMC QC identified Mr. Wan Wen Zhong was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2231-Tc-U5-F and WPS-B-T-2232-C-U2-F.

ZPMC's qualified welding personnel's are identified as Mr. Xu Kaozhen (051413) and Mr. Hua Guimei (052892) performing groove welding of weld joint SSD1-FDSA3-1B/C-47A and 50A. The personnel were observed welding in the 1G (flat) position utilizing a Submerged Arc Welding (SAW) process. ZPMC QC identified Mr. Wan Wen Zhong and was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2221-B-U3c-S-2.

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Bay 11

ZPMC's qualified welding personnel's are identified as Mr. Li Jitang (044552) performing groove welding of weld joint ED1-A274C/E-1B. The personnel were observed welding in the 1G (flat) position utilizing a Submerged Arc Welding (SAW) process. ZPMC QC identified Mr. Li Hong Fei and was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2221-B-U3c-S-2.

ZPMC's qualified welding personnel's identified as Mr. Zhang Liang (067036), Mr. Wang Yinsheng (040775) and zhang Binghua (053316) perform FCAW welding on weld joints identified ESD1-FASA3-2E/E-40, 13A and 4A. ZPMC QC identified Mr. Yun Xian was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2232-Tc-U5-F

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (134-8257-0045), who represents the Office of Structural Materials for your project.

Inspected By:	Alaniz,Joe	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer
